Analysis of the Effectiveness of Receivables Management

Zaynutdinov Ismoil Samariddinovich

Tashkent State University of Economics, independent researcher

Abstract: This article describes the characteristics of accounts receivable in financial assets. Indicators representing the effectiveness of receivables management were analyzed. Conclusions on the effect of receivables turnover rate on current asset efficiency are systematized.

Keywords: current assets, financial assets, receivables, turnover of receivables, real assets, cash flow, transaction funds, capital immobilization

1. INTRODUCTION

As a financial asset, we can see the difference between receivables and other types of investments. For example, receivables are not, first and foremost, a financial asset that arises for profit. Secondly, receivables are not quoted in financial markets. However, other investment instruments are put into circulation in order to make a profit; Also, these instruments are quoted as instruments with the possibility of free sale in the markets.

Receivables are supply of goods by the enterprise to contractors, rendering services or the sum of liabilities arising from mandatory payments to the budget and extra-budgetary funds.

In addition, advance payments on advances and taxes are another receivable, all of these elements do not fully comply with the International Financial Reporting Standard (IFRS 39) receivables as a financial asset. For instance, advance payments for capital construction are usually accounted for in fixed assets. This confirms its necessity to establish a procedure for regulating liability standards for receivables in the IFRS.

2. Literature review.

Economist Professor R. Merton points the following factor that affects to return required for them as the main financial criterion for managing any financial asset: Risk-free rate of return (Risk free rate). In particular, it provides for an interest rate that aggregates the average market value of capital, this value is perceived as a risk-free rate of return. Government bonds are generally treated as such profitable financial assets.

Zvi Lieber and Yair Orgler recommended an integral model consisting of variables like receivables management of fast debt repayment volume, crediting duration, the duration of the discount period, fines and sanctions, the value of debt collection costs in their book called «An Integrated Model for Accounts Receivable Management». In this model investing in receivables, losses on hopeless debts and the impact on the volume of commercial credit realization is also systematized [1].

Economists Wenfeng Wua, Oliver M. Rui and Chongfeng Vua conducted researches on receivables in current assets and having a mutually variable description of cash flow and their performance of related functional elements. They systematized dependence of funds on the volume of commercial credit based on their researches in 1626 non-financial enterprises during 1999-2009 years[2]. According to the results, these economists systematized the findings that an increase in receivables by $ 1 led to a decrease in cash by $ 0.15.

Economists A. Ferrando and K. Mulier investigated the impact of receivables on economic growth as an element of commercial credit instruments. Their receivables, which are above the optimal level as an element of working capital, have systematized the impact on the decline in revenue efficiency by slowing down the current asset turnover[3]. As an another economic nature of receivables their impact on rising transactional expenses was systematized in J. Ferrison's scientific works [4].

Scientific views on the impact of monetary policy on the receivables and payables of small and medium enterprises can be found in the researchs of Wuun Guy Choi and Yungsan Kim. They developed a regression model based on analysis of 500 companies in the list of S&P 500 involving variables like the relationship between receivables and payables to monetary policy receivables, accounts payable and net trade credit.

Economists R. Basto and J. The Pindados systematized scientific views on the general change in trade credit during cyclical fluctuations in the economy. They systematized scientific views on the functional role of the elements of commercial credit in the context of problems with the payment system in times of cyclical fluctuations in the economy [5].

Characteristics of receivables as an element of working capital and their role as an automatic financial stabilizer was systematized in the scientific views of economists such as Banos S. Kaballero, J.P.Garcia-Teruel, P. Martines - Solano. They developed a correlation of receivables with current asset turnover and profitability and a regression model based on these variables [6].

3. Research methodology.

It is known that receivables are key elements of transaction funds in the current assets of economic entities. In addition, these financial assets form an active element of commercial credit, the optimal management of which primarily affects the efficiency of current assets, as well as the balanced development of economic entities. Based on this, this scientific article makes extensive use of theoretical and empirical methods of conducting scientific research, such as scientific abstraction, observation, grouping, and economic-mathematical modeling.

4. Analysis and discussion of results.

Accounts receivable are an important element of working capital, and its share in the assets of the enterprise depends on the macroeconomic situation in the country and the level of development of the monetary system. In other words, accounts receivable arise as a result of a commercial loan and the provision of a deferred payment for products sold (services rendered, work performed) to its customers. That is, when there is a time interval between the date of payment for goods and services produced in the absence of payment for transactions, the sale of goods is reflected in the form of accounting for receivables. That's why most economists acknowledge that element of current assets forms transaction funds. Indeed, receivables lead to a situation of deviation from the turnover of own funds, and as a result, an excessive increase in these debts leads to a slowdown in the turnover of current assets. However, many economists point out that the formation of receivables in the course of its financial and economic activities in the enterprise is a normal, natural phenomenon [5]. For the debtor company, this is a seemingly free source of additional working capital, and for the lending company, it is an opportunity to maintain and expand their product sales markets.

In accordance with International Financial Reporting Standards (IFRSs) (IAS 39), accounts receivable are recognized as non-derivative financial assets and do not actively participate in transactions in financial markets, and this instrument is not intended for trading operations [9].

In this respect, we can see that it differs from receivables and other types of investments as a financial asset. For example, receivables are not, first and foremost, a financial asset that arises for profit. Secondly, receivables are not quoted in financial markets. However, other investment instruments are put into circulation in order to make a profit; Also, these instruments are quoted as instruments with the possibility of free sale in the markets.

Furthermore, while prepayments on advances and taxes are other receivables, do not all of these elements fully comply with the rate charged as a financial asset to receivables in International Financial Reporting Standard 39. For example, advances to capital construction are usually accounted for in property, plant and equipment. This situation confirms the need to introduce uniform standards for accounting for receivables in IFRS.

Also, the accounts receivable must meet a number of criteria to be recognized as an asset in accordance with IFRS:
➢ the probability of economic benefit should be high;
➢ the value of the asset should be based on reliable estimates.

By their economic nature, accounts receivable are subdivided into those that are in the process of selling goods (works and services) and those that are not related to that process. For example, it accelerates and coordinates the sale of goods through loans and advances to suppliers and customers. At the same time, accounts receivable have the opportunity to coordinate the process of reproduction, which is organized in the enterprise, and to directly affect it.
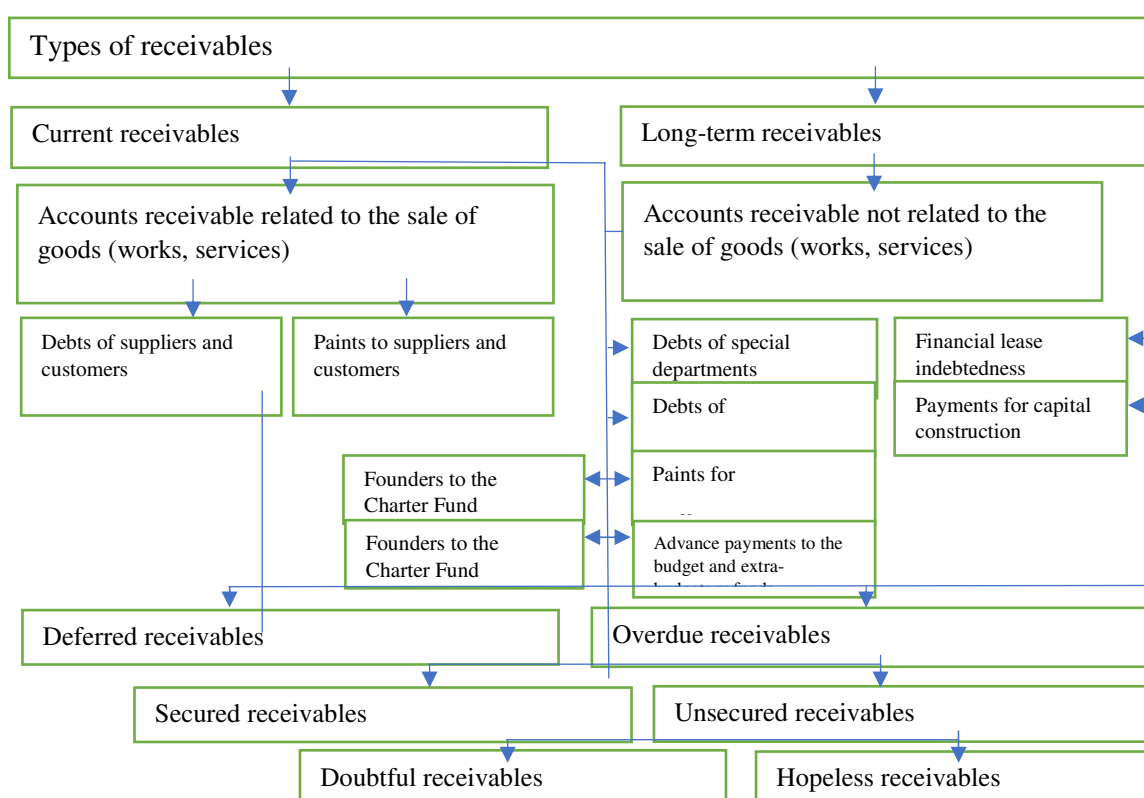
Illustration 1. Accounts receivable and its classification.

Mandatory allocations to internal divisions, personnel, budget and extra-budgetary funds of the joint-stock company are neutral in terms of their direct impact on the production process, and are carried out in terms of current and fiscal obligations. Therefore, it is possible to conclude the following nature of receivables, namely:

firstly, receivables are a type of receivable that can be borrowed free of charge as a source of additional current assets for receivables;

secondly, financial instrument for maintaining and expanding the sales segment in the market of manufactured goods for creditors;

thirdly, a type of financial assets of the enterprise in the form of advance payments on internal and personnel liabilities to the budget for future expenses.

As can be seen from the data in Table 1, under the influence of the above external and internal factors, the trend of structural change of accounts receivable is observed in the analyzed period. As part of receivables, advance payments to suppliers and customers in 2014-2020 fluctuate from 52.99% to 79.13%.

Table 1 Information on receivables of the joint-stock company "Навоийдонмаҳсулотлари", as a percentage of the total [1]

Indicators / years	2014	2015	2016	2017	2018	2019	2020
Debts of buyers and customers	5,22	5,33	20,56	26,20	5,76	3,52	3,70
Debts of subsidiaries	14,35	23,65	22,70	19,01	27,64	27,83	0,77
Advances to staff	0,03	0,01	0,01	0,00	0,00	0,00	0,02
Advances to suppliers and customers	74,37	66,31	52,99	52,40	62,51	64,74	79,13
Advances on taxes and fees to the budget	1,33	0,96	0,78	0,64	1,04	1,62	13,66
Advances to state purposeful funds	0,16	0,00	0,00	0,00	0,00	0,17	0,17
Personnel debts on other operations	1,12	1,26	0,88	0,97	1,04	0,64	0,85
Other receivables	3,42	2,49	2,07	0,77	2,01	1,47	1,71

Further development of advance payments in reforms to improve the tax mechanism to avoid a cash gap between revenues and expenditures to the state budget affects the turnover of current assets and, in particular, receivables in most enterprises to meet fiscal obligations. For example, in accordance with the Tax Code of the Republic of Uzbekistan, advance payments of income tax have been reorganized, taxpayers whose total income exceeds five billion soums during the current reporting period are required to pay monthly advance payments after the full quarter in which such increase occurred[7].

In 2016-2017, the share of consumer debt in total receivables was 20.56 and 26.2%, respectively. Hence, the contribution of this element of receivables in the increase in the share of working capital under the influence of problems with the payment system during these periods was high.

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[1] "Навоийдонмаҳсулотлари" The joint-stock company is formed by the author on the basis of annual financial statements.

Receivables turnover ratio fluctuated between 3,94 and 6,21 during the time when it was analyzed. A high figure in this ratio indicates that the turnover of receivables has accelerated. As a result, the period for repayment of receivables was reduced from 91.36 days to 57.97 days. If we analyze the share of receivables in current assets, in 2016 it was 22.2%. By 2020, this figure would be 16.5%.

Table 2 Indicators of the receivables' status [2]

Indicators	Calculation methods	2015	2016	2017	2018	2019	2020
Accounts receivable turnover ratio	$Д_а = Т/Д_{кўрт}$	5,01	3,94	6,20	5,34	4,73	6,21
Accounts receivable repayment period, in days	$С=360/Д_а$	71,9	91,36	58,04	67,47	76,18	57,97
Share of receivables in current assets, in %	$К_у=(Д_к/А_ж)*100$	20,5	22,2	17,7	26	26,3	16,5
Receivables ratio to revenue ratio	$К_{дк/т} = Д_к / Т$	0,22	0,28	0,18	0,18	0,26	0,13
Capital immobilization coefficient	$К_{им}= К/Д_к$	0,17	0,19	0,16	0,20	0,23	0,14
The ratio of accounts payable to accounts receivable	$К_{к/д}= К_к/Д_к$	3,34	2,82	1,49	0,36	0,03	0,21

The turnover rate of current assets is functionally directly related to the turnover rate of receivables. The degree of impact of this relationship depends on the level of the receivables' share in current financial assets.

For example, the turnover of receivables in 2019, which affected the turnover of current assets, can be calculated like this:

$$\lambda_n^t = \frac{R_n}{CA_n} = \frac{145485,3}{30784,6} = 4,73$$

$$\lambda_{01}^t = \frac{R_{n*1}}{CA_n} = \frac{198368,6}{30784,6} = 6,44$$

$$\lambda_{n+1}^t = \frac{R_{n+1}}{CA_{n+1}} = \frac{198368,6}{31945,35} = 6,21$$

Based on the above calculations, the dynamics of the annual change in current asset turnover is calculated as follows:

$$\Delta\lambda_n^t = \lambda_{01}^t - \lambda_n^t = 6,44 - 4,73 = 1,71$$

$$\Delta\lambda_s^t = \lambda_{n+1}^t - \lambda_{01}^t = 4,73 - 6,21 = -1,48$$

$$\Delta\lambda_\varepsilon^t = 1,71 - 1,48 = 0,23$$

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[2] "Навоийдонмахсулотлари" The joint-stock company is formed by the author on the basis of annual financial statements.

This means that the annual rate of turnover of receivables in 2020 will increase by 0.23 times and this increase also depends on a number of factors:

1. The annual growth of revenue from sales of products in "Navoiydonmahsulotlari" JSC amounted to 52883.3 mln. soums, while the turnover of receivables increased by 1.71 times.

2. The value of receivables in 2020 compared to 2019 amounted to 11101.5 mln. soums, which reduced their impact on the speed of rotation by 1.48 times.

3. Based on the above data, it can be concluded again that due to the increase in the turnover rate of current assets, their turnover period was reduced to 23 days, from 300 days in 2019 to 277 days in 2020.

5. Conclusion and suggestions.

As a result of the research conducted and based on the above, the following conclusions and recommendations can be formed.

First of all, the decrease in the share of receivables in current assets provides a tendency to reduce working capital, which in turn ensures the concentration of current assets in the production process. In general, this indicator is a positive factor in operational financial management, creating opportunities for strengthening payment discipline, increasing the efficiency of use of current assets.

Second of all, a decrease in the share of receivables in current assets will lead to a decrease in the impact of measures to increase its turnover on the total current assets turnover. In particular, accounts receivable management efficiency indicators provide a decrease in the importance of current asset management efficiency.

If we look at the capital immobilization coefficient, in the analyzed period, this coefficient tends to change from 0.16 to 0.23. This means that 16% to 23% of the capital is accumulated to a certain extent in relatively low fixed assets. A coefficient of 0.14 in 2020 indicates that the share of relatively slow-moving capital is declining and asset efficiency is increasing.

We can consider the analysis of the status of accounts payable and receivable, which is one of the elements of commercial credit in the enterprise, through the ratio of accounts payable to accounts receivable. This ratio was higher than the 1 threshold criterion in 2015-2017. So, this series of liabilities of the enterprise was more than the liabilities of other counterparties to the enterprise as receivables. In addition, during this period it emerged as a borrower for the foreign market at face value. But from 2018 this ratio has been less than 1. This means that the liabilities of the enterprise are less than the liabilities of other counterparties. This fact confirms that the balanced management of accounts payable and receivables has a positive impact on the financial stability of the enterprise.

Therefore, in the future, the financial services system will be tasked with continuous monitoring of receivables and payables in the balanced management of receivables and payables. Indeed, as we have seen above, an excessively high proportion of receivables leads to an increased risk of financial instability, creating additional financial needs. An excess of current accounts payable in the company's liabilities over receivables in current assets ($K_{к/д} > 1$) may increase the risk of liquidity loss. It is expedient to consider this ratio as one of the main criteria for balanced management of accounts payable and receivable.

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